

Remarks/Arguments:

Claims 15-24 and 29 are pending in this application. Claims 16 and 18-24 stand withdrawn from consideration. Claims 15, 17 and 29 stand rejected under 35 U.S.C. § 112 and § 103. Applicants have amended claim 15 and request reconsideration and allowance of claims 15, 17 and 29 as well as rejoinder of claims 16, and 18-24 following such allowance for the following reasons.

I. Claim rejection under 35 U.S.C. § 112, 2d paragraph.

Claims 15, 17 and 29 stand rejected under 35 U.S.C. § 112, 2d paragraph as being indefinite for failing to particularly point out and distinctly claim the invention. Specifically, the rejection states that it is not clear what the sentence "opening the lip of the channel to allow the central portion to be entrained along the conveyance direction" encompasses. Furthermore, the rejection continues, "...the elected species of Fig. 10-12b and 16a-b does not show the above method. The method appears to be related to nonelected species of fig. 18a-b".

Applicants respectfully disagree with this rejection for the following reasons.

The claim language refers to opening the "lid" of the channel rather than the lip of the channel. As shown in figures 11(a) and 12(a) as well as 16(a) the channel 4(a) includes a bottom section (lid) that opens up as shown by arrow 15. (See page 15 first and second paragraphs which describe the operation of the channel lids with reference to the embodiment of figures 12 and 13.)

Thus the sequence of steps claimed in claim 15 are associated with figures 10-12 and 16 which are the elected figures. These steps are:

(i) cutting off at least one edge laterally from the central portion along the conveyance direction. The conveyance direction is that of arrow "F" in the figures as explained in the specification;

(ii) cutting at least one edge along a direction transverse to the conveyance direction; This is shown in the figures as element 2(a) [knife retracted] and 2(b) [knife extended]

(iii) taking up said at least one edge into the processing line through edge channel(s) said channel(s) comprising a section substantially closed with movable lids; For example, channel 4(a) is shown with a closed bottom lid taking up one edge 1(a) into the direction of the processing line that is toward the take up roller 11.

(iv) securing said at least one edge in a pulling unit located at along the processing line past said channel(s); The end 1(a) is shown attached to roller 11.

(v) opening the lids of the channel(s) to allow the central portion to be entrained along said conveyance direction into the processing line; The opened lid step is shown in figures 12(a) and 16(a).

(vi) stopping the lateral cutting and cutting the central portion transversely to the conveyance direction. The knives 3(a) and 3(b) perform this function.

Once the web has been cut transversally to the conveyance direction and the cutting along the conveyance direction has stopped, the web will follow the previously cut edges into the processing line letting the cut off central portion of the web fall below. Applicants have amended claim 15 by the addition of the words "into the processing line" following the words "opening the lids of the channel(s) to allow the central portion to be entrained along said conveyance direction" to remove any possibility of confusion as to which is the conveyance direction.

Applicants therefore believe that claim 15 does indeed read on the elected species of figures 10-12b and 16a-b and therefore respectfully request that the section 112 2d paragraph rejection be withdrawn. Applicants also believe that the sentence "...opening the lids (not lip) of the channels ..." clearly states the process step whereby the lid that prevents the central portion of the web from been dragged by the edge leads into the processing line open to allow the full web to pass through into the processing line.

II. Claim rejection under 35 U.S.C. § 103(a).

Claims 15, 17 and 29 stand rejected under 35 U.S.C. § 103(a) as obvious in view of Jobst (United States patent number 4,454,452) over Sumida et al. (United States patent number 5,899,129).

The present invention as more fully described in the specification and figures, is directed to a process and associated apparatus for automatically pulling a web into a processing line. This is done by first forming at least one leader portion in the web, and taking up the leader into the processing line while letting the bulk of the web fall outside the processing line. The leader is continuously formed by cutting a strip along one or both sides of the web and picking up the strip(s) into the processing line while letting the rest of the web fall out of the processing line. Once the leader has been taken up into the processing line, the full web is next allowed to follow the leader into the processing line by (a) stopping the formation of the leader portion of the web and (b) cutting off the web section that was not connected to the leader portion so that the web reverts to a single web without a separate leader portion as it travels through the processing line.

Amended claim 15 clearly sets forth this process by the amended language in steps (v) and (vi) which read: " ... (v) opening the lids of the channel(s) to allow the central portion to be entrained along said conveyance direction into the processing line; and (vi) stopping said lateral cutting of said at least one edge and cutting the central portion transversely to the conveyance direction whereby said edge portion(s) entrain said central portion through said channel(s) into the processing line."

Steps (v) and (vi) in particular set forth the two operations that need to take place for the web to be entrained in the processing line. The channel lids which were closed during the leader engagement operation must open so that the full width of the web can move in the direction of the processing line, something not possible with the channel lids closed, and the leader forming operation must terminate. This is accomplished by stopping the longitudinal cutting of the web and also by transversely cutting off the portion of the web that was been directed outside the processing line while the leader was taken up. These two operations may be performed in either order, but both must be completed for the web to be entrained into the processing line.

Thus the invention as whole is completely different from the inventions disclosed in the art applied by the Examiner. Jobst's invention is a process for removing the edge strips from cardboard sheets not for creating leaders to be used to entrain a web through a processing line. The Sumida disclosure is a processing device for automatically processing trimmings generated in a slitter in which a web is run and slit into a plurality of strips. Therefore the gist of the present invention as a whole is not disclosed or suggested by either Jobst or Sumida or a combination of the two.

The next question then becomes whether the proposed amended claims do indeed properly claim the invention, or, as the Examiner suggests simply describe an obvious process that results from the combination of the two disclosures. (Jobst and Sumida).

Neglecting for the moment the issue of whether such combination of art is proper in this case, that is, whether there is sufficient motivation present in either Jobst or Sumida to combine the references beyond the inadequate fact that both relate to web slitting, such combination still does not render the present process claimed obvious.

Jobst does not disclose or suggest the claimed feature of threading and feeding a web into a processing line, the web comprising both central portion and edges. In Jobst, the web as a whole is first secured in the device (the processing line) and then cut.

In contrast, claim 15 recites (i) cutting off edges laterally from the central portion before (iv) securing said edges and subsequently feeding and threading the web (comprising the central portion together with the edges). Thus, in the invention of claim 15, the edges are cut before the web is secured in the processing line. Furthermore, as acknowledged by the Examiner, Jobst does not show any step corresponding to the step of opening the channel lids as claimed. Neither does Sumida.

Sumida discloses a device for automatically processing trimmings generated in a slitter in which a web is run and slit into a plurality of strips. The document notably discloses the steps of:

- (i) cutting a trimming (of the side of the web) along the conveyance direction (fig. 1, slitting section 6);

- (ii) cutting said at trimming along a direction transverse to the conveyance direction (fig. 1, trimming cutting unit 10):
- (iii) catching an end of the trimming (with the trimming hook 26) for conveying the trimming to an air conveyor duct 23, in order to subsequently convey the trimming toward a trimming compactor disposed downstream (col. 3, li. 44 – 65);
- (iv) holding the trimming (fig. 11A, thanks to the trimming hook 26 and subsequently a nip roller 28, col. 5, li. 6 – 20).

The method disclosed in Sumida is basically a method for processing trimmings, where the web and trimmings are conveyed along different lines. The web processing line comprises for instance the take-up section and rollers 3b-d of figures 2 – 4. The trimming processing line notably comprises an air conveyor duct (see fig. 1). The trimmings are never fed into the web processing line, at any stage.

Thus, Sumida does not disclose taking up an edge into the processing line through edge channel(s), as in step (iii) of present claim 15, but rather teaches the catching of an end of the trimming for conveying the trimming to an air conveyor duct, in order to subsequently convey the trimming toward a trimming compactor disposed downstream. Thus Sumida does not disclose the claimed feature of threading and feeding a web comprising both central portion and edges into a processing line.

Moreover, Sumida is silent about opening channel lids so as to allow the central portion to be entrained. Applicants were unable to identify reference 41 in Sumida mentioned by the Examiner in support of the statement that Sumida teaches opening lids or the purpose of leading the end of a new cutoff edge strip with greater possible reliability. (Page 3 lines 8-10 of the Office Action).

Nowhere in Sumida may one find a teaching of securing said at least one edge in a pulling unit located at the other extremity of the processing line (as in step (iv) of present claim 15), since the trimming is not passed at all through the processing line according to the present invention, that is, which processes the web. Neither does Sumida teach cutting the central portion transversely and stopping the longitudinal cutting of the web edges as in step (vi) of present claim 15, but rather teaches a continuous step of cutting the central portion of the web in strips.

In sum neither Jobst nor Sumida teach or suggest the particular sequence of steps forming the claimed method for the automatic feeding of a web into a processing line. While both Jobst and Sumida show slitting operations on webs, neither even remotely suggests the claimed process.

Selecting and combining individual elements/steps from the art in order to create a process rendering the claimed process obvious without some motivation in the art for such selection and combination is impermissible. The motivation for the combination must be found in the art not in the claimed invention. The simple fact that both Jobst and Sumida discuss process or equipment elements that may be used in web slitting processes does not constitute sufficient motivation to lift certain steps from each to reconstruct the present claim. Jobst teaches slitting and discarding waist in trimming of web edges. Sumida teaches a process for slitting webs to form cut pieces and discard trimmings. The steps shown in Jobst and Sumida are nothing more than individual steps/elements used in different ways than the present invention. In that sense they are nothing but known prior art elements that may be used in new combinations to create new processes. Inventions are made every day from known or existing elements. It is the realization of new combinations that are patented, provided that nothing in the prior art suggests such new combinations. Neither Jobst nor Sumida provide that suggestion.

Conclusion.


Because neither Jobst nor Sumida teach a method where a temporary longitudinal slitting process is used to form leads in a web which are taken up in a processing line while the central portion of the web is prevented from entering the processing line followed by a second web slitting and removal of the preventing mechanism mechanism which cuts off the previously discarded central portion of the web and stops the longitudinal slitting, thereby no longer forming the leads but entraining the full web into the processing line, a prima facie case of obviousness has not been made. As a result claims 15 and 17 and 29 are shown to be non obvious in view of the applied prior art and Applicants respectfully request that the amended claims be reconsidered and the claims allowed.

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Applicants also request that claims 16, and 18-24 be rejoined and also allowed, following allowance of claims 15, 17 and 29.

Respectfully submitted,



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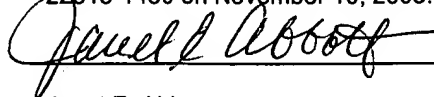
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